

# ACADSB Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)  
Catalog # AW5336

## Product Information

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<b>Application</b>	WB
<b>Primary Accession</b>	<a href="#">P45954</a>
<b>Reactivity</b>	Human
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Calculated MW</b>	47485
<b>Isotype</b>	Rabbit IgG
<b>Antigen Source</b>	HUMAN

## Additional Information

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<b>Gene ID</b>	36
<b>Antigen Region</b>	239-273
<b>Other Names</b>	Short/branched chain specific acyl-CoA dehydrogenase, mitochondrial, SBCAD, 2-methyl branched chain acyl-CoA dehydrogenase, 2-MEBCAD, 2-methylbutyryl-coenzyme A dehydrogenase, 2-methylbutyryl-CoA dehydrogenase, ACADSB
<b>Dilution</b>	WB~~1:1000
<b>Target/Specificity</b>	This ACADSB antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 239-273 amino acids from the Central region of human ACADSB.
<b>Format</b>	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
<b>Storage</b>	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
<b>Precautions</b>	ACADSB Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

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<b>Name</b>	ACADSB ( <a href="#">HGNC:91</a> )
<b>Function</b>	Short and branched chain specific acyl-CoA dehydrogenase that catalyzes

the proR-proR stereospecific alpha,beta-dehydrogenation of fatty acyl-CoA thioesters using the electron transfer flavoprotein (ETF) as their physiologic electron acceptor, resulting in the formation of trans-2-enoyl-CoA ((2E)-enoyl-CoA) (PubMed:[10832746](#), PubMed:[11013134](#), PubMed:[21430231](#), PubMed:[7698750](#)). Among the different mitochondrial acyl-CoA dehydrogenases, acts specifically on short and branched chain acyl-CoA derivatives such as (S)-2-methylbutyryl-CoA as well as short straight chain acyl-CoAs such as butyryl-CoA (butanoyl- CoA) (PubMed:[10832746](#), PubMed:[11013134](#), PubMed:[21430231](#), PubMed:[7698750](#)). Plays an important role in the metabolism of L- isoleucine by catalyzing the dehydrogenation of 2-methylbutyryl-CoA, one of the steps of the L-isoleucine catabolic pathway (PubMed:[10832746](#), PubMed:[11013134](#)). Can also act on valproyl-CoA, a metabolite of valproic acid, an antiepileptic drug (PubMed:[8660691](#)).

**Cellular Location**

Mitochondrion matrix

**Tissue Location**

Ubiquitously expressed, with highest levels in heart, muscle and liver.

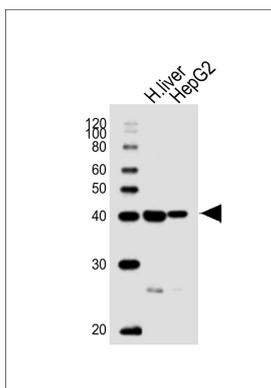
**Background**

Has greatest activity toward short branched chain acyl- CoA derivative such as (s)-2-methylbutyryl-CoA, isobutyryl-CoA, and 2-methylhexanoyl-CoA as well as toward short straight chain acyl-CoAs such as butyryl-CoA and hexanoyl-CoA. Can use valproyl- CoA as substrate and may play a role in controlling the metabolic flux of valproic acid in the development of toxicity of this agent.

**References**

Rozen R.,et al.Genomics 24:280-287(1994).  
Andresen B.S.,et al.Am. J. Hum. Genet. 67:1095-1103(2000).  
Ota T.,et al.Nat. Genet. 36:40-45(2004).  
Deloukas P.,et al.Nature 429:375-381(2004).  
Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.

**Images**



Western blot analysis of lysates from human liver tissue lysate,HepG2 cell line (from left to right), using ACADSB Antibody (Center)(Cat. #AW5336). AW5336 was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody.Lysates at 20ug per lane.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.